AMSAT Weekly Satellite Report
Issue: WSR-161
Date: 2013-06-10
Sources: amsat-ans-2013-wsr-161-weekly-hyperkitty-786a92ea19.txt

---
This report is organized into four (4) parts.
Part 1 (S1) - operational analog amateur satellites
Part 2 (S2) - operational digital amateur satellites
Part 3 (S3) - non - operational satellites
Part 4 (S4) - deborbited/returned satellites

SB SAT @ AMSAT W8ISS $WSR-161.S1
WSR 161 Part 1 06/10/2013

AMSAT NEWS SERVICE BULLETIN 161.S1
FROM AMSAT HQ SILVER SPRING, MD, June 10, 2013
TO ALL RADIO AMATEURS
BID: $WSR-161.S1

NEE-01 Pegasus
Catalog Number: 39151

Launch date: April 26, 2013
Launch site: Jiuquan Space Center, PRC

Status: Reported possible collision with space junk

Mode: ?

Downlink: 910MHz wide band signal - 720dpi HD
CW
SSTV
Voice announcement
[05272013]
=====
TURKSAT-3USAT
Catalog Number: 39152

Launch Date: April 26, 2013 0413z
Launch site: Jiuquan Space Center, PRC

Status: On orbit

Mode: V/u

Uplink: 145.940-145.990MHz
Downlink: 435.200-435.250MHz

Beacon: 437.225MHz CW

Callsign:

IARU Coordination Page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=213

URL:
[05272013]
=====
PW-Sat
Catalog Number: 38083

Launch Date: Febrauary 13, 2012 1000z

Launch Site: Kourou, French Guiana

Status: On Orbit

Mode: V/u

Uplink: 435.020 MHz FM
Downlink: 145.900 MHz DSB

Beacon:

Callsign:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=132

URL:
[05272013]
=====
DO-64 Delfi-C3
Catalog number: 32789

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Mode: Science Mode - Beacon ONLY

Telemetry: 145.870 MHz

Downlink: 145.880 to 145.920 MHz
Uplink: 435.530 to 435.570 MHz

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=68

URL: http://www.delfic3.nl/
[05272013]
=====
VO-52 HAMSAT
Catalog number: 28650

Launch Date: May 05, 2005 0444z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Mode: U/v

Frequencies:
Indian Transponder:
Uplink: 435.220 to 435.280 MHz LSB/CW
Downlink: 145.930 to 145.870 MHz USB/CW

Dutch Transponder:
Uplink: 435.225 to 435.275 MHz LSB/CW
Downlink: 145.925 to 145.875 MHz USB/CW

Indian Beacon: 145.9360 MHZ CW
Dutch Beacon: 145.860 MHz 12WPM with CW message

Mode and Antenna Polarization:
V: LHCP

U: RHCP

Official Webpage: http://www.amsatindia.org/hamsat.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=30
[05272013]
=====
SO-50 SAUDISAT-1C
Catalog number: 27607

Launch date: December 20, 2002 1700z
Launch site: Baikonur, Kazakhstan

Status: Operational

Mode: V/u

Uplink: 145.850 MHz FM - 67.0 Hz PL tone
Downlink: 436.795 MHz

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://saudisat.kacst.edu.sa/index.shtml
(not up and running currently)

To switch the transmitter on, you need to send a CTCSS tone of 74.4
Hz. The order of operation is thus: (allow for Doppler as necessary):
1) Transmit on 145.850 MHz with a tone of 74.4 Hz to arm the 10 minute
   timer on board the spacecraft.
2) Now transmit on 145.850 MHz (FM Voice) using 67.0 Hz to PT the re-
   peater on and off within the 10 Minute window.
3) Sending the 74.4 tone again within the 10 minute window will reset
   the 10 minute timer.
[05272013]
=====
FO-29 JAS-2
Catalog number: 24278

Launch Date: August 17, 1996
Launch site: Tanegashima Space Center, Japan

Status: Operational

Mode: V/u (Mode JA)

Voice/CW (Mode JA)
Uplink: 145.90 to 146.00 MHz CW/LSB
Downlink: 435.80 to 435.90 MHz CW/USB
Beacon: 435.795 MHz

Digital Mode JD
Uplinks: 145.850 MHz FM
          145.870 MHz FM
          145.910 MHz FM
Downlink: 435.910 MHz 1200-baud BPSK or 9600-baud FSK
Callsign: 8J1JCS
Digitalker: 435.910 MHz

Mode and Antenna Polarization:
V: RHCP
U: RHCP

```
For current operational schedule for FO-29:
http://www.ne.jp/asahi/m-arai/gkz/satinfo/fo29e.htm

JARL English webpage:
http://www.jarl.or.jp/English/5_Fuji/ejasmenu.htm

AMSAT-NA Webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID
=5&retURL=/satellites/status.php

Mineo Wakita, JE9PEL, has created a simple decoder program for FO29's
CW telemetry downlink: http://www.ne.jp/asahi/hamradio/je9pel/
fo29cwts.htm
[05272013]
=====
AO-7 AMSAT OSCAR 7
Catalog number: 07530

Launch Date: November 15, 1974
Launch site: Vandenberg AFB, California, USA

Status: Operational

Mode: Alternating between Mode A (V/a) and Mode B (V/u)

Uplink:   145.850 to 145.950 MHz CW/USB Mode A
          432.125 to 432.175 MHz CW/LSB Mode B
Downlink:  29.400 to 29.500 MHz CW/USB Mode A (1W PEP)
          145.975 to 145.925 MHz CW/USB Mode B (8W PEP)
          145.975 to 145.925 MHz CW/USB Mode C (2W PEP)
Beacons:   29.502 MHz CW
          145.972 MHz CW
          435.100 MHz CW
         2304.100 MHz CW

Official Webpage:
http://www.amsat.org/amsat-new/satellites/sat_summary/ao7.php
[05272013]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur Cosmodrome, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Possible Modes: FM Repeater - OFF
                Voice -       V/v
                BBS -         V/v
                2m APRS -     V/v
                2m Digi -     V/v
                70cm APRS -   U/u
                70cm Digi -   U/u
                SSTV -        V/v

Status: Operational

Expedition 36 Crew (May 2013 - September 2013):
Commander:               Pavell Vladimirovich  RV3BS
Flight Engineer:         Aleksandr Misurkin
Flight Engineer:         Christopher Cassidy   KF5KDR
```

```
Flight Engineer:          Fyodor Nikolayevich
Flight Engineer:          Karen L. Nyberg
Flight Engineer:          Luca Parmitano        KF5KDP


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:              145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                       145.800 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:
Belgian:                        OR4ISS
German:                         DP0ISS
Russian:                        RS0ISS
                                RZ3DZR
United States:                  NA1SS
2m Packet Mailbox:              RS0ISS-11
2m Digipeater alias:            ARISS
70cm Packet Mailbox:            RS0ISS-1
70cm Digipeater callsign:       RS0ISS
70cm Digipeater alias:          ARISS


Official ARISS Webpage:         http://www.rac.ca/ariss
ISS Fan Club Webpage:           http://www.issfanclub.com
APRS tracking page:             http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06102013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-161.S2
WSR 161 Part 2 06/10/2013

AMSAT NEWS SERVICE BULLETIN 161.S2
FROM AMSAT HQ SILVER SPRING, MD, June 10, 2013
TO ALL RADIO AMATEURS
BID: $WSR-161.S2
```

Name: ESTCUBE-1
Catalog Number: 39161

Launch date: May 05, 2013
Launch site: Kourou, French Guiana

Status: Operational

Downlink(s): 437.505MHz 9k6 bps AX.25 telemetry
Beacon(s): 437.250MHz CW

Callsign: ES5E/S Beacon
ES5E-11 9.6kbps AX.25

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=171

URL:http://www.estcube.eu/en/
[05272013]
=====
CubeBug-1
Catalog Number:

Launch date: April 26, 2013
Launch site: Jiuquan Space Center, PRC

Status: Reported possible collision with space debris

Mode: /u

Downlink(s): 437.445MHz 1k2bps AX.25 AFSK

Callsign: LU1VZ-11

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=239

URL: http://1.cubebug.org/
[05272013]
=====
OSSI-1
Catalog Number: 39131

Launch Date: April 19, 2013
Launch Site: Tyuratam Missile and Space Center, Kazakhstan

Status: On orbit

Mode: /u

Uplink(s):
Downlink(s): 145.980 MHz CW
437.525 MHz 1k2bps
Beacon(s):

Callsign: DS1SBO (?)

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=290
[05272013]
=====
SOMP
Catalog Number: 39135

Launch Date: April 19, 2013
Launch Site: Tyuratam Missile and Space Center, Kazakhstan

Status: On orbit

Mode: /u
Uplink(s):
Downlink(s):437.485 MHz 1k2/9k6

Callsign: DM1EF (?)

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=173
[05272013]
=====
BEESAT-2
Catalog Number: 39136

Launch Date: April 19, 2013
Launch Site: Tyuratam Missile and Space Center, Kazakhstan

Status: On orbit

Mode: /u

Downlink(s): 435.950 MHz 4k8bps GMSK/Mobitex

Callsign: DJ1JBL

IARU Coordination Page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=233

URL: http://www.raumfahrttechnik.tu-berlin.de/beesat/
[05272013]
=====
BEESAT-3
Catalog Number: 39134

Launch Date: April 19, 2013
Launch Site: Tyuratam Missile and Space Center, Kazakhstan

Status: On orbit

Downlink(s): 10 M/b

Callsign: DJ1JBL

IARU Coordination Page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=234

URL: http://www.raumfahrttechnik.tu-berlin.de/beesat/
[05272013]
=====
STRaND-1
Catalog Number: 39090

Launch Date: February 25, 2013 12:31z
Launch Site: Satish Dhawan Space Centre, India

Status: Operational

Mode: /u

Downlink:437.568MHz 9k6 FSK

URL: http://www.sstl.co.uk/Missions/STRaND-1--Launched-2013
[05272013]
=====
Fitsat-1
Catalog number: 38853

Launch Date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space Station

Status: Operational

Mode: /u
/c
/Light

Downlink(s): 437.445MHz 1k2 AFSK
5840.00 MHz 115k2 data
LED CW (200w pulses)

Beacon(s): 437.250 MHz CW

Callsign: NIWAKA

URL: http://carpcomm.com/satellite/fitsat1
[05272013]
=====
We Wish
Catalog number: 38856

Launch date: October 04,2012
Launch Site: Kibo Japanese Experiment Module, International Space Station

Status: Operational

Mode: /u

Downlink(s): 437.505MHz 1k2 AFSK
437.505MHz SSTV

Beacon(s): 437.505MHz CW

Callsign: JQ1ZIJ
[05272013]
=====
Aeneas
Catalog Number: 38760

Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Mode: /s
/u

Uplink: WiFi 2425MHz
Downlink(s): WiFi: 2425MHz
Spread Spectrum: Somewhere in the 70cm band

Beacon: 437.600MHz 1k2 ax25 every 10 seconds
[05272013]

=====
CSSWE (Colorado Student Space Weather Experiment)
Catalog Number: 38761

Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Downlink: 437.345MHz 9k6 with ax.25
[10012012]
=====
CP5 (Polysat)
Catalog Number: 38763

Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Downlink: 437.405MHz AFSK on LSB ax.25 over NRZI at 1k2 baud, every 2
minutes
begins 3.5 hours after first turn-on
[10012012]
=====
CXBN (Cosmic X-Ray Background Nanosatellite)
Catalog Number: 38762

Launch Date: September 12, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: On Orbit

Downlink: 437.525MHz GFSK ax.25
[10012012]
=====
Proiteres
Catalog Number: 38756

Launch Date: September 09, 2012 2139z
Launch Site: Satish Dhawan Space Centre, India

Status: On Orbit

Downlink: 437.485MHz FM/AFSK

Callsign: JL3YZK
[10012012]
=====
RS-40 MiR (Yubileiny-2)
Catalog Number: 38735

Launch Date: July 28, 2012
Launch Site: Plesetsk Missile and Space Complex, Russia

Status: On Orbit

Downlink(s): 435.265 MHz
435.365 MHz
[08272012]
=====
HORYU-II
Catalog number: 38340

Launch Date: May 17, 2012 1639z

Status: On Orbit

Uplink: 145.??? MHz
Downlink: 437.375 MHz CW/AX25/FSK

Beacon: 437.375 MHz CW

Callsign: JG6YBW
IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=216
[10012012]
=====
XaTcobeo
Catalog Number: 38082

Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Downlink: 437.365 MHz FFSK with AX.25

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=135
[100162012]
=====
UniCubeSat
Catalog Number: 38085(?)

Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Downlink: 437.305 MHz 9k6 bps GMSK

URL:
http://www.gaussteam.com/index.php?option=com_content&view=article&id=96:unicu
besat&catid=36:unicubesat&Itemid=183

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=133
[10012012]
=====
Robusta
Catalog Number: 38083(?)

Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Downlink: 437.325 MHz 1k2 FM telemetry (data every 3 min, 20 sec. burst)

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=122
[10012012]
=====
MO-72 MaSat-1
Catalog Number: 38081

Launch Date: Febrauary 13, 2012 1000z

Launch Site: Kourou, French Guiana

Status: Operational

Downlink(s): 437.345 MHz GFSK 625/1250 bps
437.345 MHz CW

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=126
[10012012]
=====
Goliat
Catalog Number: 38084(?)

Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: Operational

Downlink: 437.485 MHz 1k2 AFSK

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=98
[10012012]
=====
E-St(a)r
Catalog Number: 38079

Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Downlink: 437.445 MHz 1k2 bps AFSK

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=130
[10012012]
=====
ALMASat-1
Catalog Number: 38078

Launch Date: Febrauary 13, 2012 1000z
Launch Site: Kourou, French Guiana

Status: On Orbit

Downlink(s): 437.465 MHz 1k2 bps FSK
2407.850 MHz

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=39
[10012012]
=====
RS-39 Chibis-M
Catalog Number: 38051

Launch Date: October 30, 2011 10:11:00 UTC
Launch site: Tyuratam (Baikonur Cosmodrome), Kazakhstan

Status: Operational

Beacon: 435.315 MHz CW
435.215 MHz CW

[07302012]
=====
JUGNU
Catalog Number: 37839

Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 145.??? MHz 1k2 (mode?)
Downlink: 437.505 MHz 9k6 (mode?)

Beacon: 437.275 MHz 15 wpm (?) CW

URL: http://www.iitk.ac.in/me/jugnu/index.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=160
[07092012]
=====
SRMSAT
Catalog Number: 37841

Launch Date: October 12, 2011 05:30:00 UTC
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Uplink: 145.900 MHz 1k AX.25 (speed?)
Downlink: 437.500 MHz 2k4 AX.25

Beacon: 437.425 MHz 12 wpm CW

URL: http://srmsat.in/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=181
[01282013]
=====
HRBE (E1P Explorer 1 [Prime] CubeSat (E1P-U2))
Catalog Number: 37855

Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Uplink: 437.305 MHz (???)
Downlink: 437.505 MHz AX.25

URL: http://ssel.montana.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=116
[01122012]
=====
M-Cubed
Catalog Number: 37855

Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Downlink: 437.485 MHz AX.25

URL: http://umcubed.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=215
[01122012]
=====
RAX-2
Catalog Number: 37853

Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: Operational

Downlink: 437.345MHz 9k6 GMSK

URL: http://rax.engin.umich.edu//

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=221
[03232012]
=====
AO-71 AubieSat-1
Catalog Number: 37854

Launch Date: October 28, 2011
Launch site: Vandenberg Air Force Base, California, USA

Status: On Orbit

Downlink: 437.475 MHz 1k2 AX.25

Beacon: 437.475 MHz CW

Callsign: KI4NQO

URL: http://www.space.auburn.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=148
[12262011]
=====
O/OREOS
Catalog Number: 37224

Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Downlink: 437.035 MHZ AX.25

URL: http://www.ooreos.org/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=146
[02092011]
=====
Rax-1 Radio Aurora Explorer
Catalog Number: 37223

Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: On Orbit

Downlink: 437.505 MHz 9k6 GMSK

Callsign: RAX-1

URL: http://rax.engin.umich.edu/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=165
[02092011]
=====
FO-69 Fastrac-1 Sara Lily
Catalog Number: 37227

Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 145.980 MHz 1k2 baud
Uplink 2: 145.825 MHz 1k2 baud
Downlink: 437.345 MHz 1k2 and 9k6 baud

Beacon: 437.435 MHz 1k2 AX.25

Callsign: Fast1

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=83
[07052011]
=====
FO-70 Fastrac-2 Emma
Catalog Number: 37380

Launch Date: November 20, 2010
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

Uplink 1: 435.025 MHz 1k2 baud
Uplink 2: 437.435 MHz 9k6 baud
Downlink: 145.825 MHz 1k2 and 9k6 baud

Beacon: 145.825 MHz 1k2 AX.25

Callsign: Fast2

URL: http://fastrac.ae.utexas.edu/index.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=84
[12162011]
=====
StudSat
Catalog Number: 36796

Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On Orbit

Uplink: 437.505MHz, 9600bps FSK
Downlink: 437.505MHz, 9600bps FSK
Beacon : 437.505MHz,   20bps ASK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=164
[02092011]
=====
TIsat-1
Catalog Number: 36799

Launch Date: July 12, 2010 0352z
Launch site: Satish Dhawan Space Centre, India

Status: On orbit

Callsign: HB9DE

Uplink: 145.980MHz FM, AFSK
Downlink: 437.305MHz FM, AFSK
Beacon: 437.305MHz CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=118
[02092011]
=====
SwissCube
Catalog Number: 35932

Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: HB9EG

Beacon(100mw): 437.5050MHz CW
Beacon(1w):   437.5050MHz FSK 1k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=109
[02092011]
=====
UWE-2
Catalog Number: 35934

Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: In Orbit

Beacon(500mw): 437.3850 MHz AFSK 1k2bps
               437.3850 MHz FSK 9k6bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=110
[02092011]
=====
ITUpsAT1
Catalog Number: 35935

Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Beacon(100mw): 437.325MHz CW
Beacon(1w): 437.325MHz 19k2bps

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=113
[02092011]
=====
BEESAT
Catalog Number: 35933

Launch Date: September 23, 2009 0621z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Callsign: DP0BEE

Beacon(100mw): 436.000MHz CW
Beacon(500mw): 436.000MHz GMSK 4k8bps
Beacon(500mw): 436.000MHz GMSK 9k6bp
[02092011]
=====
SOHLA-1 (ASTRO TECH.)
Catalog Number: 33496

Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Proposed Frequencies and Modes:
Downlink: 437.505 MHz AFSK/CW
Beacon: 437.505 MHz AFSK/CW

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=101
[02092011]
=====
KAGAYAKI (Solan Co.)
Catalog Number: 33495

Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: In Orbit

Downlink: 437.375 MHZ   FSK9k6/CW
Beacon: 437.375 MHz   FSK9k6/CW
[02092011]
=====
STARS (Kagawa Univ.) (Twin Satellites)
Catalog Number: 33498

Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational ?

Downlinks: 437.485 MHz FM/CW

```
           437.465 MHz FM/CW
Beacons:   437.305 MHz FM/CW
           437.275 MHz FM/CW

Callsigns: JR5YBN
           JR5YBO

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=99

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=121&retURL
=/satellites/status.php
[02092011]
=====
KKS-1 (Tokyo MCIT)
Catalog Number: 33499

Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Downlink:  437.455 MHz AFSK/CW
Beacon:    437.385 MHz AFSK/CW

Callsign: JQ1YYY

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=107

AMSAT-NA webapge:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=120&retURL
=/satellites/status.php
[20092011]
=====
PRISM (Tokyo Univ.)
Catalog Number: 33493

Launch Date: January 23, 2009 0354z
Launch site: Tanegashima Space Center, Japan

Status: Operational

Uplink:   145.xxx MHz AFSK 1k2
Downlink: 437.425 MHz AFSK 1k2
Beacon:   437.250 MHz CW

Callsign: JQ1YCX

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=97

Read terms and conditions of operations at the PRISM web page to find
out how
to properly operate on the satellite and to get the uplink frequency. It
has
been asked that the uplink frequency not be given out untik you have
read and
understood the terms of usage.

URL:
http://www.space.t.u-tokyo.ac.jp/prism/en/HAMservice.html
[10282012]
```

=====
RS-30 Radio Sputnik 30 (Yubileiny)
Catalog Number: 32953

Launch Date: May 23, 2008 1520z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Curent Modes: Telemetry
Audio
Images

Downlinks: 435.315 MHz
435.215 MHz

AMSAT-NA website:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=115&ret
URL=/satellites/status.php

Official website:
http://www.npopm.com/?cid=leoca&caid=43
[02092011]
=====
CanX-2
Catalog number: 32790

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational in range of ground station only

Downlink: 437.478 MHz GFSK

For the latest project status update please visit the Can X-2 web
page: http://www.utias-sfl.net/nanosatellites/CanX2/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=46
[02092011]
=====
AAUSAT-II
Catalog number: 32788

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.425 MHz 1k2 baud packet

For the latest project status update please visit the AAUSAT-II web
page:
http://www.aausatii.aau.dk/homepage/index.php?language=en&page=home

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=60
[02092011]
=====
CO-65 CUTE-1.7+APD II
Catalog number: 32785

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.475 MHz 9k6 Packet
Uplink: 1267.600 Mhz

Telemetry Beacon:
Downlink: 437.2750 MHz CW

For the latest project status update please visit the Cute-1.7+APD II
web page: http://lss.mes.titech.ac.jp/ssp/cute1.7/index_e.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78

Command Station blog website:
http://lss.mes.titech.ac.jp/ssp/cute1.7/blog/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=112&retURL
=/satellites/status.php
[03232012]
=====
Compass-1
Catalog number: 32787

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Current Mode: dependant on last received command

Uplink: 145.980 MHz FM
Downlink: 437.275 Mhz CW
          437.405 MHz Packet

For the latest project status update please visit the Compass 1 web
page: http://www.raumfahrt.fh-aachen.de/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=52

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=114&retURL
=/satellites/status.php
[06162011]
=====
CO-66 Seeds II
Catalog number: 32791

Launch Date: April 28, 2008 0354z
Launch site: Satish Dhawan Space Centre, India

Status: Operational

Downlink: 437.485 MHz

Callsign: JQ1YGU

For the latest project status update please visit the Seeds 2 web
page: http://cubesat.aero.cst.nihon-u.ac.jp/english/seeds_2_e.html

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=36

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=113&retURL
=/satellites/status.php
[073092011]
=====
CAPE-1
Catalog Number: 31130

Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Intermittent

TLM Downlink: 435.245 MHz 9600 bs FSK AX.25
CW Beacon: 435.245 MHz CW

Callsign: K5USL

TLM and CW interchange every 30 seconds.

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=94&retURL=
/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=72
[02092011]
=====
CP3
Catalog Number: 31129

Launch Date: April 17,2007 0702z
Launch site: Baikonur, Kazakhstan

Status: Operational

Downlink: 436.845 MHz 1200 bps AFSK AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=74
[02092011]
=====
CO-58 CubeSat XI-V
Catalog number: 28895

Launch Date: October 27, 2005 0652z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational - CW Beacon only

Telemetry Downlink: 437.4250 MHz AFSK 1200bps using AFK protocol
Beacon: 437.2750 MHz CW

Callsign: JQ1YGW

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/

Pictures received by Mineo Wakita - JE9PEL:
http://www.ne.jp/asahi/hamradio/je9pel/xivpicte.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=37

[02092011]
=====
CO-57 CubeSat XI-IV
Catalog number: 27848

Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: In orbit

Beacon: 436.8475 MHz CW
Telemetry : 437.4900 MHz AFSK 1200 BPS

Callsign: JQ1YGW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=96&retURL
=/satellites/status.php

Official Webpage: http://www.space.t.u-tokyo.ac.jp/cubesat/mission/V/
[02092011]
=====
QuakeSat
Catalog Number: 27845

Launch Date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Telemetry only

Mode U packet
Downlink: 436.675 MHz 9k6 BPS

Quakesat webpage:
http://www.quakefinder.com/services/quakesat-ssite/
[02252011]
=====
CO-55 Cute-1.7+APD II
Catalog Number: 27844

Launch date: June 30, 2003 1415z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

Current Mode: CW downlink worldwide
AX25 Packet with uplink command over Japan only

Mode U Telemetry
Downlink: 437.4000 MHz AFSK 1200 BPS

Mode U TLM Beacon
Downlink: 436.8375 MHz CW

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=69&retURL
=/satellites/status.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=78
[02092011]
=====
NO-44 PCSAT
Catalog number: 26931

Launch Date: September 30, 2001 0240z
Launch site: Kodiak Launch Complex, Alaska, USA

Status: Operational

General Usage Uplink/Downlink: 145.827 MHz 1200 Baud
Special Usage Downlink: 144.390 Mhz 1200 Baud

PCSAT APRS page: http://pcsat.aprs.org

aprstlm Telemetry Decoder program:
http://www.xciv.org/~iain/aprstlm/v1.2/
[10292012]
=====
RS-22 RADIO SPORT 22 (MOZHAYETS 4)
Catalog number: 27939

Launch Date: September 27, 2003 0612z
Launch site: Plesetsk Missile and Space Complex, Russia

Status: Operational

CW Beacon - 435.352 MHz
145.818 MHz

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=76&retURL
=/satellites/status.php
[02092011]
=====
LO-19 LUSAT
Catalog number: 20442

Launch date: January 22, 1990
Launch site: Kourou, French Guiana

Status: CW Beacon only

Uplinks: 145.840 MHz 1200-baud Manchester FSK
145.860 MHz 1200-baud Manchester FSK
145.880 MHz 1200-baud Manchester FSK
145.900 MHz 1200-baud Manchester FSK

CW downlink: 437.125 MHz

Digital downlink: 437.150 MHz SSB (RC-BPSK 1200-baud PSK)

Broadcast Callsign: LUSAT-11
BBS: LUSAT-12

General information and telemetry samples can be found at:
www.telecable.es/personales/ea1bcu
[02092011]
=====
UO-11 OSCAR-11
Catalog number: 14781

Launch Date: March 1, 1984
Launch site: Vandenburg AFB, California, USA

Status: Operational

Mode: Telemetry only

```
Telemetry Downlink: 145.825 MHz FM 1200 AFSK
UHFBeacon:          435.025 MHz
Mode-S Beacon:     2401.500 MHz

Mode and Antenna Polarization:
V: RHCP
S: LHCP

Webpage: http://www.users.zetnet.co.uk/clivew/
MPEG3 files: http://www.ne.jp/asahi/hamradio/je9pel/uo11tlme.htm
[07052011]
=====
INTERNATIONAL SPACE STATION (ISS) - ARISS
Catalog number: 25544

Launch date: November 20, 1998 0640z (ZARYA module)
Launch sites: Baikonur Cosmodrome, Kazakhstan
              Kourou, French Guiana
              Uchinoura Space Center, Japan
              Kennedy Space Center, Titusville, Florida, USA

Status: Operational

Possible Modes: FM Repeater - OFF
                Voice -       V/v
                BBS -         V/v
                2m APRS -     V/v
                2m Digi -     V/v
                70cm APRS -   U/u
                70cm Digi -   U/u
                SSTV -        V/v


Expedition 36 Crew (May 2013 - September 2013):
Commander:                Pavell Vladimirovich  RV3BS
Flight Engineer:          Aleksandr Misurkin
Flight Engineer:          Christopher Cassidy   KF5KDR
Flight Engineer:          Fyodor Nikolayevich
Flight Engineer:          Karen L. Nyberg
Flight Engineer:          Luca Parmitano        KF5KDP


Available Modes and Frequencies:
Digital/APRS:
Worldwide 2m packet uplink:     145.825 MHz FM 1k2
Worldwide 2m packet downlink:   145.825 Mhz FM 1k2
Worldwide 70cm packet uplink:   437.550 Mhz FM 1k2
Worldwide 70cm packet downlink: 437.550 Mhz FM 1k2

Voice:
Region 1 voice uplink:          145.200 MHz FM
Region 2/3 voice uplink:        144.490 MHz FM
Worldwide downlink:             145.800 MHz FM

Crossband Repeater:
Repeater Uplinks:              1269.650 MHz FM
                                437.800 MHz FM
                                145.990 MHz FM - 67.0 PL (Kenwood)
Repeater Downlink:              145.800 MHz FM
                                437.800 MHz FM (Kenwood)

SSTV Robot 36:
Downlink:                       145.800 MHz FM
```

Mode and Antenna Polarization:
V: Linear
U: Linear

Callsigns:

Belgian:	OR4ISS
German:	DP0ISS
Russian:	RS0ISS
	RZ3DZR
United States:	NA1SS
2m Packet Mailbox:	RS0ISS-11
2m Digipeater alias:	ARISS
70cm Packet Mailbox:	RS0ISS-1
70cm Digipeater callsign:	RS0ISS
70cm Digipeater alias:	ARISS

Official ARISS Webpage: http://www.rac.ca/ariss
ISS Fan Club Webpage: http://www.issfanclub.com
APRS tracking page: http://www.ariss.net/

ISS Daily Crew Schedule: http://spaceflight.nasa.gov/station/timelines
Remember that the crew operates on UTC time. Also, all of the time
line is NOT translated from Russian and posted.
[06102013]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-161.S3
WSR 161 Part 3 06/10/2013

AMSAT NEWS SERVICE BULLETIN 161.S3
FROM AMSAT HQ SILVER SPRING, MD, June 10, 2013
TO ALL RADIO AMATEURS
BID: $WSR-161.S3

THE FOLLOWING ARE IN ORBIT BUT ARE NON-OPERATIONAL AT THIS TIME:

NANOSAIL-D
Catalog Number: 37361

Ejection Date: January 17, 2011
Launch date:
Launch site:

Status: Non - Operational

Downlink: 437.270 MHz AX.25

URL: http://nanosaild.engr.scu.edu/dashboard.htm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=115
[07302012]
=====
HO-68 HOPE-1 (CAS-1) (XW-1)
Catalog Number: 36122

Launch Date: December 15, 2009 0231z
Launch site: Taiyuan Space Center, PRC

Status: Telemetry only

Mode:

Callsign:
Broadcast: BJ1SA-11
BBS: BJ1SA-12

Uplinks: 145.8250 MHz FM, PL 67.0 Hz.
145.9250 - 145.9750 MHz SSB/CW
145.8250 MHz AFSK 1200 BPS
Downlinks: 435.6750 MHz FM
435.7650 - 435.7150 MHz SSB/CW
435.6750 MHz AFSK 1200 BPS

Beacon: 435.7900 MHz CW

Mode and Antenna Polarization:
V: LHCP 2.0dBi max
U: RHCP 3.0dBi max

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=108

For more information about XW-1 (CAS-1):
http://
[04302012]
=====
SO-67 SumbandilaSat
Catalog Number: 35870

Launch Date: September 17, 2009 1555z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Mode:

Callsign: ZS0SUM

Uplink: 145.875MHz FM tone 233.6 Hz
Downlink: 435.345MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

For more information about SO-67:
http://www.amsatsa.org.za/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=88
[01272012]
=====
CP4
Catalog Number: 31132
Launch Date: April 17, 2007

Status: Non-Operational

Mode:

TLM Downlink: 437.325 MHz 1200 bps FSK AX.25
CW Beacon: 437.325 MHz CW

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=79
[09062010]
=====
LIBERTAD-1
Catalog Number: 31128

Launch Date: April 17, 2007
Launch site:

Status: Non-Operational

Mode:

Callsign: 5K3L

Uplink: 145.825 MHz 1200 AFSK ax25 APRS
Downlink: 437.399 MHz 1200 AFSK ax25 APRS

Telemetry Beacon: 437.4050 MHz 1200 AFSK ax25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=76
[09062010]
=====
PO-63 PEHUENSAT-1
Catalog Number: 29712

Launch Date: January 10, 2007
Launch site:

Status: Non-Operational

Mode:

Uplink/Downlink: 145.825 Mhz FM
Voice Recorder: 145.825 Mhz FM

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=51
[09062010]
=====
NCUBE-2
Catalog number: 28897

Launch Date: October 27, 2005
Launch site:

Status: Still attached to XO-53 (SSETI)

Proposed Callsign: TBA

Proposed Transmit Frequency: 437.305
                             2407.250

Official Website: http://www.ncube.no

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=24
[09062010]
=====
XO-53 SSETI
Catalog number: 28894

Launch Date: October 27, 2005

```
Launch site:

Status: Non-operational

Mode:

Voice Uplink:        437.250 MHz FM 67Hz CTCSS
Voice Downlink:     2401.835 MHz FM
Packet Up/Downlink:  437.250 MHz 9k6 packet
Packet Downlink     2401.835 MHz 38k4 packet

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=54
[09062010]
=====
UWE-1
Catalog Number: 28892

Launch Date: October 27, 2005
Launch site:

Status: Non-Operational

Mode:

Mode U Telemetry
Downlink: 437.5050 MHz 9600 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=53
[09062010]
=====
AO-51 ECHO
Catalog number: 28375

Launch date: June 29, 2004 0745z
Launch site: Baikonur, Kazakhstan

Status: Non - Operational

Current Mode(s):
Voice repeater: V/u
Uplink:      145.880 MHz FM
Downlink:    435.150 MHz FM

Telemetry: Recovery efforts
Downlink:    435.150MHz 9k6


Analog voice downlink:     435.300 MHz FM
                           435.150 MHz FM
                          2401.200 Mhz FM
Analog voice uplink:       145.860 MHZ FM
                           145.880 MHz USB
                           145.880 MHz FM
                           145.920 MHz FM
                           145.920 MHz FM - 67 Hz PL tone burst
                          1268.705 MHz FM
Digital Downlinks:         435.150 MHz FM 38k4 PBP, 1 watt output
                           435.150 MHz FM 9k6 Pacsat Broadcast Protocol
                          2401.200 MHz FM 38k4 bps, AX.25
Digital Uplink:            145.860 MHz FM 9k6 Pacsat Broadcast Protocol
                          1268.703 mhz FM 9k6 Pacsat Broadcast Protocol
Beacon:                    435.150 MHz
```

```
Mode and Antenna Polarization:
T: Linear
V: Linear
U: TX A (usually digital)LHCP
   TX B (usually analog) RHCP
L: Linear
S: Linear

Broadcast: PECHO-11
BBS: PECHO-12

Official Webpage: http://www.amsat.org/amsat-new/echo/CTNews.php

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=19
[12062011]
=====
CANX-1
Catalog Number: 27847

Launch Date: June 30, 2003
Launch site:

Status: Non-Operational

Mode:

Downlink: 437.8800 MHz AFSK 1k2bps
[06052009]
=====
DTUSAT
Catalog Number: 27842

Launch Date: June 30, 2003
Launch site:

Status: Non-Operational

Mode:

Downlink: 437.475MHz

Officail webpage: http://dtusat1.dtusat.dtu.dk/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=101&retURL
=satellites/all_oscars.php
[02212009]
=====
AO-49 AATiS OSCAR-49 (SAFIR-M)
Catalog number: 27605

Launch Date: December 20, 2002
Launch site:

Status: Non-operational.

Mode:

Uplink:   435.275 MHz 1200-baud AFSK
Downlink: 145.825 MHz 9600-baud FSK
(optional voice message)
```

Broadcast callsign: DP0AIS

Official webpage: http://amend.gmxhome.de
[01222007]
=====
MO-46 TIUNGSAT-1
Catalog number: 26548

Launch date: September 26, 2000
Launch site:

Status: Telemetry only

Uplinks: 145.850 MHz
          145.925 MHz 9600-baud FSK
Downlink: 437.325 MHz

Broadcast callsign: MYSAT3-11
BBS: MYSAT3-12

TiungSat-1 is Malaysia's first micro-satellite and in addition to
commercial land and weather imaging payloads offers FM and FSK
Amateur Radio communication.

TiungSat-1, named after the mynah bird of Malaysia, was developed as
a collaborative effort between the Malaysian government and Surrey
Satellite Technology Ltd.
[03302009]
=====
NO-45 SAPPHIRE
Catalog number: 26932

Launch Date: September 30, 2001
Launch site:

Status: Non-Operational

Mode:

Downlink: 437.095 MHz 1200 baud AX-25 AFSK
Uplink: 145.945 MHz UI Digipeater
Digi Callsign: KE6QMD
[03132005]
=====
SO-42 SAUDISAT-1B
Catalog number: 26549

Launch date: September 26, 2000
Launch site:

Status: Non-Operational

Mode:

Downlink: 437.075 MHz

Broadcast Callsign: SASAT2-11
BBS: SASAT2-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so42.html
[01222007]
=====
SO-41 SAUDISAT-1A

Catalog number: 26545

Launch Date: September 26, 2000
Launch site:

Status: Non-Operational

Mode:

Uplink: 145.850 MHz
Downlink: 436.775 MHz

Broadcast Callsign: SASAT1-11
BBS: SASAT1-12

Further information is available at:
http://www.amsat.org/amsat/sats/n7hpr/so41.html
[01222007]
=====
AO-40 AMSAT OSCAR 40
Catalog number: 26609

Launch Date: November 16, 2000
Launch site:

Status: Non-Operational

Mode:

Uplinks

V-band: 145.840 - 145.990 MHz CW/LSB
U-band: 435.550 - 435.800 MHz CW/LSB
L1-band: 1269.250 - 1269.500 MHz CW/LSB
L2-band: 1268.325 - 1268.575 MHz CW/LSB

Downlinks

S2-band: 2401.225 - 2401.475 MHz CW/USB
K-band: 24048.010 - 24048.060 MHz CW/USB
Beacon: 2401.323 MHz
         24048.035 MHz

P3-D Telemetry Beacons (IHU)

BEACON	General Beacon(GB)	Middle Beacon(MB)	Engineering Beacon(EB)
2 m	none	145.898 MHz	none
70cm	435.438 MHz	435.588 MHz	435.838 MHz
13cm(1)	2400.188 MHz	2400.338 MHz	2400.588 MHz
13cm(2)	2401.173 MHz	2401.323 MHz	2401.573 MHz
3cm	10450.975 MHz	10451.125 MHz	10451.375 MHz
1.5cm	24047.885 MHz	24048.035 MHz	24048.285 MHz

[07162007]
=====
OO-38 OPAL
Catalog Number: 26063

Launch Date: January 27, 2000
Launch site:

Status: Non-Operational

Mode:

Mode U TLM Beacon
Downlink: 437.1000 MHz 9600 FSK
[08132007]
=====
UO-36 UoSAT-12
Catalog number: 25693

Launch date: April 21, 1999
Launch site:

Status: Unknown

Mode:

Uplink: 145.960 MHz (9600-baud FSK)
Downlinks: 437.025 MHz
           437.400 MHz

Broadcast Callsign: UO121-11
BBS: UO121-12

The VK5HI viewer shareware for UO-36 is available on the AMSAT-NA web
site at the following URL:
ftp://ftp.amsat.org/amsat/software/win32/display/ccddsp97-119.zip
[01222007]
=====
SO-35 SUNSAT
Catalog Number: 25636

Launch date:February 23, 1999
Launch site:

Status: Non-Operational

Downlink: Mode B Repeater: 436.291 MHz
Mode J Digipeater: 436.250 MHz

Uplinks: Mode B Repeater: 145.825 MHz
Mode J Digipeater: 145.825 MHz
                           145.900 MHz

For more information of SUNSAT vist the satellite web site:
http://esl.ee.sun.ac.za/projects/sunsat/
[01222007]
=====
PO-34 PANSAT
Catalog number: 25520

Launch date: October 30, 1998
Launch site:

Status: Telemetry downloads only

Mode:

Uplink/downlink: 436.500 MHz

Official Webpage: http://www.sp.nps.navy.mil/pansat/
[05092004]
=====
SO-33 SEDSAT-1
Catalog number: 25509

Launch date: October 24, 1998

Launch site:

Status: Semi-operational

Mode:

Downlink: 437.910 MHz FM (9600-baud FSK)

The satellite is not currently available for uplink transmissions and
the image and transponder recovery efforts have been unsuccessful.

For more information on SedSat-1 visit the satellite web site:
http://seds.uah.edu/projects/sedsat/sedsat.htm
[09042006]
=====
GO-32 Gurwin TechSat-1B
Catalog number: 25397

Launch Date: July 10, 1998
Launch site:

Status: Non-Operational

Modes:
Telemetry : /u

Downlink: 435.225 MHz FM (9600-baud FSK)
          435.325 Mhz - Not Available - temperature problems
Uplinks: 145.850 FM
          145.890 FM
          145.930 FM
         1269.700 FM
         1269.800 FM
         1269.900 FM

Broadcast Callsign: 4XTECH-11
BBS Callsign: 4XTECH-12

More information of GO-32 can be found at:
http://asri.technion.ac.il/techsat/

AMSAT-NA webpage:
http://www.amsat.org/amsat-new/satellites/satInfo.php?satID=14&retURL
=/satellites/status.php
[07172010]
=====
TO-31 TMSAT-1
Catalog number: 25396

Launch Date: July 10, 1998
Launch site:

Status: Non-operational

Uplink: 145.925 MHz 9600 baud FSK
Downlink: 436.925 MHz 9600 baud FSK

Broadcast callsign: TMSAT1-11
BBS: TMSAT1-12
[05012006]
=====
MO-30 UNAMSAT-2
Catalog Number: 24305

Launch Date: September 5, 1996
Launch site:

Status: Non-operational

Downlink: 435.1380 MHz AFSK 1200 BPS
Downlink: 435.2060 MHz AFSK 1200 BPS
Uplink: 145.8150 MHz AFSK 1200 BPS
Uplink: 145.8350 MHz AFSK 1200 BPS
Uplink: 145.8550 MHz AFSK 1200 BPS
Uplink: 145.8750 MHz AFSK 1200 BPS
[06042009]
=====
PO-28 POSAT-1
Catalog number: 22829

Launch Date: September 25, 1993
Launch site:

Status: Non-operational

Downlink: 429.950
Uplink: Not until handover back to Amatuer usage

Broadcast callsign: POSAT1-11
BBS callsign: POSAT1-12

AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/po28.html
POSAT-1 webpage:
http://www.ee.surrey.ac.uk/SSC/CSER/UOSAT/missions/posat1.html
[01012009]
=====
AO-27 AMRAD
Catalog number: 22825

Launch Date: September 26, 1993 0140z
Launch site: Kourou, French Guiana

Status: Recovery efforts in progress

Uplink: 145.850 MHz FM
Downlink: 436.797 MHz FM

Mode and Antenna Polarization:
V: Linear
U: Linear

Official Webpage: http://www.ao27.org
[12032012]
=====
IO-26 ITAMSAT
Catalog number: 22826

Launch Date: September 26, 1993 0140z
Launch site:

Status: PSK carrier only

Uplinks: 145.875 MHz FM 1200-baud
145.900 MHz FM 1200-baud
145.925 MHz FM 1200-baud
145.950 MHz FM 1200-baud

Downlink: 435.808 MHz PSK

Broadcast Callsign: ITMSAT-11
BBS: ITMSAT-12

Official webpage: http://www.itamsat.org
AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/io26.html
[01212007]
=====
KO-25 KITSAT
Catalog number: 22828

Launch date: September 26, 1993
Launch site:

Status: Non-operational

Uplink: 145.980 MHz FM 9600-baud FSK
Downlink: 436.500 MHz FM

Broadcast Callsign: HL02-11
BBS: HL02-12
[05092004]
=====
AO-24 ARSENE
Catalog Number: 22654

Launch Date: May 13, 1993
Launch site:

Status: Non-operational

Uplink: 435.0625 MHz FM 1k2bps AFSK
           435.1125 MHz FM 1k2bps AFSK
           435.1375 MHz FM 1k2bps AFSK
Downlink: 145.9750 MHz FM 1k2bps AFSK
          2446.5025 MHz FM 1k2bps AFSK

Beacon: 2446.4700 MHz CW

Broadcast callsign:
BBS:
[12162009]
=====
KO-23 KITSAT
Catalog number: 22077

Launch date: August 10, 1992
Launch site:

Status: Non-operational

Uplink: 145.900 MHz FM (9600-baud FSK)
Downlink: 435.170 MHz FM

Broadcast Callsign: HLO1-11
BBS: HLO1-12
[01222007]
=====
UO-22 UOSAT
Catalog number: 21575

Launch date: July 17, 1991
Launch site:

Status: Non-Operational

Uplink: 145.900 FM 9600-baud FSK
Downlink: 435.120 MHz FM

Broadcast Callsign: UOSAT5-11
BBS: UOSAT5-12
[01222007]
=====
AO-21 AMSAT-OSCAR 21
Catalog Number: 21087

Launch Date: January 29, 1991
Launch site:

Status: Non-Operational

Uplink: 435.041 MHz FM DSP
Downlink: 145.983 MHz FM DSP
[01222007]
=====
FO-20 JAS-1b
Catalog number: 20480

Launch Date: February 07, 1990
Launch site:

Status: Non-Operational

Beacons: 435.795 MHz CW
           435.910 MHz AX25

Voice Transponder:
Uplink: 145.900 to 146.000 MHz CW/LSB
Downlink: 435.800 to 435.900 MHz CW/USB

Digital Transponder:
Uplinks: 145.850 MHz
          145.870 MHz
          145.890 MHz
          145.910 MHz
Downlink: 435.910 MHz

More FO-20 info can be found at:
http://www.amsat.org/amsat/sats/n7hpr/fo20.html
[01152007]
=====
WO-18 WEBERSAT
Catalog Number: 20441

Launch Date: January 22, 1990
Launch site:

Status: Non-Operational

Downlink: 437.104 MHz SSB 1200 Baud PSK AX.25
[05012006]
=====
DO-17 Dove
Catalog Number: 20440

Launch Date: January 22, 1990
Launch site:

```
Status: Non-operational.

Downlink:  145.825 MHz FM 1200 Baud AFSK
Beacon:   2401.220 MHz
[05012006]
=====
AO-16 PACSAT
Catalog number: 20439

Launch Date: January 22, 1990
Launch site:

Status: non-operational

Uplink:         145.900 MHz FM 1200-baud Manchester FSK (reserved)
                145.920 MHz FM VOICE
                145.940 MHz FM 1200-baud Manchester FSK (reserved)
                145.960 MHz FM 1200-baud Manchester FSK (reserved)

Downlink:       437.026 MHz USB VOICE
                (1200-baud PSK - MBL Telemetry Only)

Mode-S Beacon: 2401.1428 MHz [NO FUTURE OPERATIONS PLANNED]

Mode and Antenna Polarization:
U: RC  437.050 MHz RHCP
   PSK 437.026 MHz LHCP
V: Linear

Broadcast Callsign: PACSAT-11
BBS:                PACSAT-12

AO-16 AMSAT Webpage: http://www.amsat.org/amsat/sats/n7hpr/ao16.html
[07242009]
=====
UO-15 UoSAT-4
Catalog Number: 20438

Launch Date: January 22, 1990
Lunch site:

Status: Non-operational

Uplink: ?
Downlink: 435.1250MHz (?)
          435.1200MHz (?)
[06042009]
=====
UO-14 UoSAT-3
Catalog number: 20437

Launch date: January 22, 1990
Launch site:

Status: Non-operational

Uplink:   145.975 MHz FM
Downlink: 435.070 MHz FM
[05092004]
=====
FO-12 Fuji-OSCAR 12
Catalog Number: 16909

Launch Date: August 12, 1986
```

Launch site:

Status: Non-Operational

Mode V/U (J) Linear Transponder (Inverting):
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink   435.8000 - 435.9000 MHz SSB/CW

Mode V/U (J) Packet:
Uplink: 145.8500 MHz MFSK 1200 BPS
Uplink: 145.8700 MHz MFSK 1200 BPS
Uplink: 145.8900 MHz MFSK 1200 BPS
Uplink: 145.9100 MHz MFSK 1200 BPS

Downlink   435.9100 MHz PSK 1200 BPS

Telemetry Beacon: 435.7950 MHz SSB/CW
[01152007]
=====
AO-10 OSCAR 10
Catalog number: 14129

Launch Date: June 16, 1983
Launch site:

Status: Non-operational

Uplink: 435.030 to 435.180 MHz CW/LSB
Downlink: 145.975 to 145.825 MHz CW/USB

Beacon: 145.810 MHz (unmodulated carrier)

W4SM has more information about the satellite at the following URL:
http://www.cstone.net/~w4sm/AO-10.html
[05092004]
=====
AO-8 AMSAT-OSCAR 8
Catalog Number: 10703

Launch Date: March 3, 1978
Launch site:

Status: Non-Operational

Mode V/U (J) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.9000 - 146.0000 MHz SSB/CW
Downlink   435.1990 - 435.2000 MHz SSB/CW

Mode V/U (J) TLM Beacon: Non-Operational
Downlink   435.0950 MHz CW

Mode V/A (A) Linear Transponder (Non-Inverting): Non-Operational
Uplink: 145.8500 - 145.9000 MHz SSB/CW
Downlink   29.4000 - 29.5000 MHz SSB/CW

Mode V/A (A) TLM Beacon: Non-Operational
Downlink   29.4020 MHz CW
[01152007]
=====
AO-6 AMSAT-OSCAR 6
Catalog Number: 06236

Launch Date: October 15, 1972
Launch site:

```
Status: Non-Operational

Uplink:   145.9000 - 146.0000 MHz SSB/CW
Downlink:  29.4500 -  29.5500 MHz SSB/CW
Beacons:   29.450 MHz
          435.100 MHz
[01312008]
=====
AO-5 Australis-OSCAR 5
Catalog Number: 04321

Launch Date: January 23, 1970
Launch site:

Status: Non-Operational

Telemetry Beacons: 144.0500 MHz CW
                    29.4500 MHz CW
[01152007]
=====
OSCAR III
Catalog Number: 01293

Launch Date: March 09, 1965
Launch site:

Status: Non-Operational

Uplink:   145.9750 - 146.0250 MHz SSB/CW
Downlink: 144.3250 - 144.3750 MHz SSB/CW
[01012007]
=====
RS-15 RADIO SPORT RS-15
Catalog number: 23439

Launch Date: December 26, 1994
Launch site:

Status: Non-operational

Uplink:   145.858 to 145.898 MHz CW/USB
Downlink:  29.354 to  29.394 MHz CW/USB

Beacon 1:  29.352 MHz (intermittent)
Beacon 2:  29.398 MHz

SSB meeting frequency: 29.380 MHz (unofficial)
[06202004]
=====
RS-13 RADIO SPORT RS-13
Catalog number: 21089

Launch date: February 5, 1991
Launch site:

Status: Non-operational

Uplink:     21.260 to 21.300 MHz CW/USB
Downlink:  145.860 to 145.900 MHz CW/USB

Beacon:    145.860 MHz

Robot:     145.908 MHz
```

[05232004]
=====
RS-12 RADIO SPORT RS-12
Catalog number: 21089

Launch date: February 5, 1991
Launch site:

Status: Non-operational

Uplink: 21.210 to 21.250 MHz CW/USB
Downlink: 29.410 to 29.450 MHz CW/USB

Beacon: 29.408 MHz

Robot: 29.454 MHz
[05232004]
NNNN
/EX

SB SAT @ AMSAT W8ISS $WSR-161.S4
WSR 161 Part 4 06/10/2013

AMSAT NEWS SERVICE BULLETIN 161.S4
FROM AMSAT HQ SILVER SPRING, MD, June 10, 2013
TO ALL RADIO AMATEURS
BID: $WSR-161.S4

THE FOLLOWING SATELLITES HAVE RE-ENTERED OR HAVE BEEN RETURNED SAFELY:

F-1
Catalog number: 38855

Launch Date: October 04, 2012
Launch Site: Kibo Japanese Experiment Module, International Space
Station

Status: Re-entered
Re-entry date: May 09, 2013

MOde:

Uplink(s):
Downlink(s): 145.980MHz 1k2 AFSK
             437.485MHz FM moduled CW

Beacon(s):

Callsign: XV1VN

URL: http://fspace.edu.vn/
[05132013]
=====
TechEdSat
Catalog number: 38854

Launch date: October 04, 2012
Launch site: Kibo Japanese Experiment Module, International Space
Station

Status: Re-entered
Re-entry date: May 05, 2013

Mode:

Uplink(s):
Downlink(s): 437.465 1k2 AFSK
Beacon(s):

Callsign:

IARU coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=228

URL:http://www.techedsat.com/
[05062013]
=====
Bell
Catalog Number: 39145

Launch Date: April 19, 2013
Launch Site: Wallops Island, Virginia, USA

Status: Re-entered
Re-entry date: May 10, 2013

Mode:

Callsign: KJ6KRW

Uplink(s):
Downlink(s): 437.425 MHz

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=211

URL: http://phonesat.org/
[05132013]
=====
Graham
Catalog Number: 39143

Launch Date: April 19, 2013
Launch Site: Wallops Island, Virginia, USA

Status: Re-entered
Re-entry date: April 26, 2013

Callsign: KJ6KRW

Mode:

Uplink(s):
Downlink(s): 437.425 MHz

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=267

URL: http://phonesat.org
[40292013]
=====
Alexander
Catalog Number: 39146

Launch Date: April 19, 2013
Launch Site: Wallops Island, Virginia, USA

Status: Re-entered
Re-entry date: April 26, 2013

Mode:

Callsign: KJ6KRW

Uplink(s):
Downlink(s): 437.425 MHz

IARU Coordination page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=267

URL: http://phonesat.org
[40292013]
=====
HAWKSAT 1
Catalog number: 35004

Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: re-entered
Re-entry date: September 04, 2012

Mode:

Downlink: 437.345 MHz ?

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=105
[02112013]
=====
ARISSat-1
Catalog number: 37772

Launch date: August 03, 2011 1843z
Launch site: International Space Station

Status: Re-entered
Rentery date: January 05, 2012

Mode:

Callsign: RS01S

Current Mode(s):
Linear Transponder: U/v
Uplink: 435.758 to 435.742 MHz CW/LSB
Downlink: 145.922 to 145.938 MHz CW/USB

FM Telemetry/SSTV/Messages/ID:
Downlink: 145.950 MHz FM

Telemetry/Beacon:
Downlink: 145.939 MHz CW1
145.919 MHz CW2
145.920 MHz 1k BPSK USB
145.920 MHz 400b BPSK USB

Official Webpage:http://www.amsat.org/amsat-new/ARISSat/ARISSat.php

IARU coordination status page:

http://www.amsatuk.me.uk/iaru/informal_detail.php?serialnum=89
[01052012]
=====
CP-6
Catalog Number: 35003

Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-enetered
Rentry date: October 06, 2011

Mode:

Downlink: 437.365 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=121
[01282013]
=====
Pharmasat
Catalog Number: 35002

Launch Date: May 19, 2009 2355z
Launch site: Wallops Island, Virginia, USA

Status: Re-entered
Rentry date: August 14, 2012

Mode:

Downlink: 437.465 MHz 1k2 AFSK

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=94
[01282013]
=====
ANUSAT
Catalog Number: 34808

Launch Date: April 20, 2009 0115z
Launch Site: Satish Dhawan Space Centre, India

Status: Re-entered
Re-entry date : April 18, 2012

Mode:

Downlink: 435.000 MHz
Uplink: 145.800 MHz

Telemetry: 137.400 MHz
[02112013]
=====
CAERUS (Mayflower)
Catalog Number: 37252

Launch Date: December 08, 2010 15:43:00 UTC
Launch site: Kennedy Space Center, Titusville, Florida, USA

Status: Re-entered
Re-entry date: December 22, 2010

Uplink:

Downlink: 437.600 MHz 1k2 AX.25

Beacon: 437.600 MHz CW

Callsign: KJ6FIX

URL:
http://www2.isi.edu/research/prj-serc/prj-serc_projects/prj-serc_projects-8.htm

IARU coordination status page:

[01282013]
=====
Cinema
Catalog Number: 36764

Launch Date: September 13, 2012 2139z
Launch Site: Wallops Island, Virginia, USA

Status: Ren-entered
Re-entry date: Spetember 10, 2010

Uplink:
Downlink:
Engineering: 2400 - 2450MHz
Telemetery: 2200 - 2300MHz

Beacon:

Callsign:

URL:
[02112013]
=====
CO-56 CUTE-1.7 + APD
Catalog number: 28941

Launch date: February 21, 2006
Launch site:

Status: Re-entered
Re-enrty date: October 25, 2009

Uplink: 1268.5000 MHz GMSK 9600 BPS
Downlink: 437.4700 MHz 1200 FM ax25 or SRLL (ACTIVE only near Japan?)

Telemetry Beacon: 437.3850 CW
Callsign: JQ1YPC

Information webpage:
http://lss.mes.titech.ac.jp/ssp/spacerium/cute1blog/

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=56
[09062010]
=====
BEVO-1 (DRAGONSAT-1)
Catalog Number: 35690

Launch Date: May 19, 2009
Launch site:

Status: Re-entered
Re-entered:

Mode:

Downlink: 437.325 MHz 9k6 GMSK
437.325 MHz CW 20wpm

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=117
[07312009]
=====
AggieSat2 (DRAGONSAT-2)
Catalog Number: 35690

Launch Date: May 19, 2009
Launch site:

Status: Re-entered
Re-entered:

Mode:

Downlink: 436.250 MHz 9k6 FHSS
[11112009]
=====
Pollux
Catalog Number: 35693

Launch Date: July 31, 2009
Launch Site:

Status: Re-entered
Re-entered:

Callsign: POLLUX-1

Downlink: 145.825MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=139
[09062010]
=====
Castor (ANDE-2)
Catalog Number: 35694

Launch Date: July 31, 2009
Launch site:

Status: Re-entered
Re-entered:

Mode:

Callsign: KD4HBO-1

Downlink: 145.825 MHz 1k2 AX.25

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=144
[09062010]
=====
NO-62 FCAL
Catalog Number: 29667

Launch Date: December 21, 2006

Launch site:

Status: Re-Entered
Re-entered: July 28, 2008

Mode:

Downlink: 437.385 Mhz APRS AX25

Downlink ID: KD4HBO

Website: http://eng.usna.navy.mil/~bruninga/fcal.html

IARU coordination status page:
http://www.amsatuk.me.uk/iaru/finished_detail.php?serialnum=59
[01012009]
=====
NO-61 ANDE
Catalog Number: 29664

Launch Date: December 21, 2006
Launch site:

Status: Re-Entered
Re-entered: December 25, 2007

Mode:

Uplink/Downlink: 145.825 Mhz FM APRS AX25
[01032008]
=====
GENESAT-1
Catalog Number: 29655

Launch Date: December 16, 2006
Launch site:

Status: Re-Entered
Re-entered date: August 8, 2010

Mode: /u

Callsign: KE7EGC

Telemetry Beacon Downlink: 437.0695 MHz AFSK 1200 BPS

Official webpage: http://www.crestnrp.org/genesat1/ahc.html
[08082010]
=====
HO-59 HITSat
Catalog number: 29484

Launch date: September 22, 2006
Launch site:

Status: Re-Entered
Re-entered: June 18, 2008

Mode:

Telemetry Downlink: 437.4250 MHz AFSK 1200 BPS
Beacon: 437.2750 MHz CW

Callsign: JR8YJT

[01012009]
=====
SO-43 Starshine 3
Catalog Number: 26929

Launch Date: September 30, 2001
Launch site:

Status: Re-Entered
Re-entered: January 21, 2003

Mode:

Beacon: 145.825Mhz
[02212009]
NNNN
/EX

ANS is released worldwide via the AMSAT ANS e-mail reflector and a live radiocast on the AMSAT-NA 20-meter net held each Sunday on 14.282 MHz. Pre-net operations start at 18:00 UTC, with current ANS bulletins transmitted to the eastern U.S. at 19:00 UTC and to the western U.S. at 19:30 UTC.

Information on AMSAT-NA is available at the following URL:
http://www.amsat.org

Mailing address:
AMSAT-NA
850 Sligo Avenue, Suite 600
Silver Spring, Maryland 20910-4703

Voice: 301-589-6062
888-322-6728
FAX: 301-608-3410

Currently, AMSAT-NA supports the following (free) mailing lists:

* AMSAT News Service (ANS)
* General satellite discussion (AMSAT-BB)
* Orbit data (KEPS)
* Manned space missions (SAREX)
* District of Columbia area (AMSAT-DC)
* New England area (AMSAT-NE)
* AMSAT Educational Liaison mailing list (AMSAT-EDU)
* AMSAT K-12 Educational Liaison mailing list (AMSAT-K12)

A daily digest version is available for each list.

To subscribe, or for more list information, visit the following URL:
http://www.amsat.org/mailman/listinfo/ans

In addition to regular membership, AMSAT-NA offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT-NA Office.

This week's Weekly Satellite Report Editor is James French, W8ISS.

ANS is always dedicated to past ANS editor 'BJ' Arts, WT0N, and to the memory of longtime AMSAT supporters Werner Haas, DJ5KQ, Dennis Kitchen, G0FCL and John Branegan GM4IHJ.

Please send any amateur satellite news or reports to: ans-editor{at}

amsat.org
NNNN
/EX